

BEAAquaLogic® Pathways

Installation Guide

Contents

1.	Welcome to AquaLogic Pathways
	How to Use This Book
	Audience
	Organization
	Typographical Conventions
	BEA Documentation and Resources
2.	Installation Prerequisites
	Hardware and Software Requirements
3.	Quickstart Overview
	Installation
	Installing Pathways Components
	Launching the Pathways Installer
	Completing the Installer Wizard Pages
	Restarting the Portal Application Server
	Running the Security and Directory Service (SDS) Database Script3-
	Creating the Pathways Database
	Creating the Pathways Database on SQL Server 2000
	Creating the Pathways Database on SQL Server 2005
	Creating the Pathways Database (Oracle)
	Creating the Rank Engine Database
	Creating the Rank Engine Database on SQL Server 2000

	Creating the Rank Engine Database on SQL Server 2005
	Creating the Rank Engine Database on Oracle
	Configuring Pathways
	Starting the Portal
	Registering Pathways with the Portal
	Starting the Security and Directory Service (SDS) and Search Service 3-8
	Starting the SDS and Search Service on Windows
	Starting the SDS and Search Service on UNIX
	Starting Pathways
	Starting Pathways on Windows
	Starting Pathways on UNIX
	Seeding the SDS Database with Pathways Capabilities and Roles
	Installing and Configuring the Auto-Tag External Operation
	Adding Pathways Navigation Tags to the Portal Banner
	Making the Pathways User Profile Portlet Available to Users
	Accessing Pathways Administration Online Help
	Configuring Content Upload for the Pathways Submit Page
4.	Installation
	Installing Pathways Components
	Launching the Pathways Installer
	Completing the Installer Wizard Pages
	Restarting the Portal Application Server
	Running the Security and Directory Service (SDS) Database Script
	Running the SDS Database Script on SQL Server for a New Install of the SDS 4-7
	Running the SDS Database Script on Oracle for a New Install of the SDS 4-8
	Running the SDS Database Script on SQL Server for an Existing Install of the SDS.

Running the SDS Database Script on Oracle for an Existing Install of the SDS 4-8
Creating the Pathways Database
Creating the Pathways Database on SQL Server 2000
Creating the Pathways Database on SQL Server 2005
Creating the Pathways Database on Oracle
Creating the Rank Engine Database
Creating the Rank Engine Database on SQL Server 2000
Creating the Rank Engine Database on SQL Server 2005
Creating the Rank Engine Database on Oracle
Configuring Pathways
Starting the Portal
Registering Pathways with the Portal
Starting the Security and Directory Service (SDS) and Search Service 4-15
Starting the SDS and Search Service on Windows
Starting the SDS and Search Service on UNIX
Starting Pathways
Starting Pathways on Windows
Starting Pathways on UNIX 4-16
Seeding the SDS Database with Pathways Roles and Capabilities
Installing and Configuring the Auto-Tag External Operation
Adding Pathways Navigation Tags to the Portal Banner
Making the Pathways User Profile Portlet Available to Users 4-18
Accessing Pathways Administration Online Help
Configuring Content Upload for the Pathways Submit Page
Prerequisites4-2
Locating the Content Upload Web Service URL and Content Source ID 4-2
Configuring Content Upload for Pathways

5. Upgrade	
Upgrading from Pathways 1.0 to Pathways 1.0 MP1	5-1
A. Troubleshooting	
Overview of Logs	A-1
Installation Logs	
Runtime Logs	
Troubleshooting Common Installation Problems	
Using the Logging Utilities	
B. Licensing	
Licensing Overview	B-1
Installation Behavior	B-2
Upgrading an Existing License	B-3
Merging License Keys	B-3
C. Uninstalling Pathways	
Uninstalling Pathways on UNIX	
Uninstalling Pathways on Windows	
Index	

Installation Guide for BEA AquaLogic Pathways 1.0 MP1

Welcome to AquaLogic Pathways

This book describes how to install AquaLogic Pathways.

How to Use This Book

This guide has been designed to be a quick reference for users with installation experience, while also providing detailed instructions for users installing for the first time.

Audience

This guide is written for the user responsible for installing Pathways. This user must have strong knowledge of the platform operating system, database, web and application servers, and any other third-party software required for installation.

Organization

This guide includes the following chapters:

- This chapter provides information on how to use this guide and describes other resources available to help install, deploy, and administer Pathways.
- Chapter 2, Installation Prerequisites, provides hardware and software requirements, as well
 as environmental and third-party software prerequisites. You must read this chapter and
 meet the prerequisites prior to proceeding to the installation.
- Chapter 3, Quickstart Overview, provides a high level overview of the Pathways installation procedures. Sufficient detail is provided to allow an experienced portal

administrator to quickly install Pathways. Cross-references link the high level tasks to detailed procedures in the Installation chapter.

- Chapter 4, Installation, provides detailed instructions for installing and configuring Pathways.
- Appendix A, Troubleshooting, provides descriptions and locations of Pathways log files and instructions for troubleshooting Pathways.
- Appendix B, Licensing, provides information about how licensing is configured for Pathways.
- Appendix C, Uninstalling Pathways, provides instructions for uninstalling Pathways.

Typographical Conventions

This book uses the following typographical conventions.

Table 1-1 Typographical Conventions

Convention Typeface Examples/Notes		Examples/Notes
Items you need to take action on (such as files or screen elements)	bold	 Upload Procedures.doc to the portal. To save your changes, click Apply Changes.
 User-defined variables New terms Emphasis Object example names 	italic	 The migration package file is located in install_dir\serverpackages. Portlets are Web tools embedded in your portal. The URI must be a unique number. The example Knowledge Directory displayed in Figure 5 shows the Human Resources folder.
 Text you enter Computer generated text (such as error messages) Code samples 	computer	 Type Marketing as the name of your community. This script may generate the following error: ORA-00942 table or view does not exist Example: <pre></pre>
Environment variables	ALL_CAPS	The default location of BEA_HOME is C:\bea.

BEA Documentation and Resources

This section describes other documentation and resources provided by BEA.

Table 1-2 BEA Documentation and Resources

Resource	Description
Installation and Configuration Worksheet	This worksheet allows you to record prerequisite information necessary for installing and configuring AquaLogic Pathways. It is available on edocs.bea.com/pathways/docs10/ .
Release Notes	The release notes provide information about new features, issues addressed, and known issues in the release.
	They are available on edocs.bea.com/pathways/docs10/ and on any physical media provided for delivering the application.
Online Help	The online help is written for all levels of Pathways users. It describes the user interface for Pathways and gives detailed instructions for completing tasks in Pathways. To access online help, click the help icon.
Deployment Guide	This guide is written for business analysts and system administrators. It describes how to plan your AquaLogic User Interaction deployment. It is available on edocs.bea.com/alui/deployment/index.html .
Developer Guides, Articles, API Documentation, Blogs, Newsgroups, and Sample Code	These resources are provided for developers on the BEA dev2dev site (dev2dev.bea.com). They describe how to build custom applications using AquaLogic User Interaction and how to customize AquaLogic User Interaction products and features.

Table 1-2 BEA Documentation and Resources

Resource Description AquaLogic User The ALUI and ALBPM Support Center is a comprehensive repository for technical Interaction (ALUI) information on ALUI and ALBPM products. From the Support Center, you can access products and documentation, search knowledge base articles, read the latest news and and AquaLogic **Business Process** information, participate in a support community, get training, and find tools to meet Management most of your ALUI and ALBPM-related needs. The Support Center encompasses the (ALBPM) Support following communities: Center **Technical Support** Submit online service requests, check the status of your requests, search the knowledge base, access documentation, and download maintenance packs and hotfixes. **User Group** Participate in user groups; view webinars, presentations, the CustomerConnection newsletter, and the Upcoming Events calendar. **Product Center** Download product updates, maintenance packs, and patches; view the Product Interoperability matrix (supported third-party products and interoperability between products). **Developer Center** Download developer tools, view code samples, access technical articles, and participate in discussions. **Education Services** Review the available education options, then choose courses by role and delivery method (Live Studio, Public Classroom Training, Remote Classroom, Private Training, or Self-Paced eLearning). **Profile Center** Manage your implementation details, local user accounts, subscriptions, and more. If you do not see the Support Center when you log in to http://support.plumtree.com, contact ALUISupport@bea.com or ALBPMSupport@bea.com for the appropriate access privileges.

Table 1-2 BEA Documentation and Resources

Resource	Description
Technical Support	If you cannot resolve an issue using the above resources, BEA Technical Support is happy to assist. Our staff is available 24 hours a day, 7 days a week to handle all your technical support needs.
	E-mail: <u>ALUISupport@bea.com</u> or <u>ALBPMSupport@bea.com</u>
	Phone Numbers:
	USA, Canada +1 866.262.7586 or +1 415.263.1696
	EMEA +44 1494 559127
	Asia Pacific +61 2.9931.7822
	Australia/NZ +61 2.9923.4030
	Singapore +1 800.1811.202

Welcome to AquaLogic Pathways

Installation Prerequisites

Complete the following basic steps to prepare your network and host computers for deployment:

- Read the product release notes for information on compatibility issues, known problems, and workarounds that might affect how you proceed with your deployment. Release notes are located at the top-level directory of the product package.
- 2. Print the configuration worksheets provided in the Pathways Installation and Configuration Worksheets document: Installation_Configuration_Worksheets_AL_Pathways_v1-0.pdf
- Determine the values you have assigned for this deployment, and record these values in the Pathways Installation and Configuration Worksheets document.
- 4. Provision host computers for your deployment and install prerequisite software. For details, see Hardware and Software Requirements.

Hardware and Software Requirements

The following table summarizes the hardware, operating system, and software requirements for Pathways.

Caution: IPv6 is not supported. You should verify that IPv6 is not enabled prior to installing Pathways.

Note: For an up-to-date list of supported versions, refer to the Interoperability page in the Support Center.

Table 2-1 Hardware and Software Requirements

Component	Requirements	
Pathways Host Computer	Recommended Minimum Hardware (Development Installation)	
	• 2GHz CPU	
	• 2GB RAM	
	Recommended Minimum Hardware (Production Deployment)	
	• 2GHz CPU or better	
	• 1.0GB RAM per instance of the Pathways application	
	• 1.5GB RAM per instance of the Security and Directory Service	
	• 0.5 GB RAM per instance of the Search Service	
	• 1.0GB RAM for the Rank Engine	
	Operating System	
	• Windows 2003 Server SP1 or R2, on x86	
	• Solaris 9 and 10 on SPARC	
	Solaris 9 requires these patches:	
	• 111711-15 (32-bit Shared library patch for C++)	
	• 111712-15 (64-Bit Shared library patch for C++)	
Database Server Host	Hardware	
Computer	• Dual 2.0 GHz or higher, with 2 MB L2 cache	
	• 2 GB memory or higher	
	 Mirrored SCSI drives (either 15K or 10K RPM) 	
	Software	
	 Microsoft SQL Server 2000 SP4; Microsoft SQL Server 2005 	
	• Oracle 9.2.0.4 and above (in default or Oracle RAC configuration)	
	 Oracle 10.1.0.3 and above and 10g R2 (in default or Oracle RAC configuration) 	
Browser	Administrative Users: Internet Explorer 6.0, 7.0; Firefox 2.0	
	• Browsing Users: Internet Explorer 6.0, 7.0; Netscape 7.2, 8.0; Firefox 1.5, 2.0; Safari 2.0 (Mac only)	

Table 2-1 Hardware and Software Requirements

Component	Requirements
AquaLogic Interaction	BEA AquaLogic Interaction 6.1 MP1
Analytics	AquaLogic Analytics 2.1

Installation Prerequisites

Quickstart Overview

This chapter provides brief, high level instructions for the installation of Pathways. It is intended to quickly guide experienced administrators through the installation procedure. It covers installing the Pathways components, scripting the databases, and starting and verifying the installation. The organization of this section maps directly to detailed instructions in Chapter 4, "Installation".

Installation

Before you install Pathways, verify that you have completed the pre-installation steps. For details, see Installation Prerequisites.

Installing Pathways Components

This section discusses how to install Pathways components.

Launching the Pathways Installer

To launch the Pathways installer:

- 1. Log in to the remote server host computer as the local administrator (on Windows) or a user with directory write privileges (on UNIX).
- 2. Copy the installer to the disk location from which you plan to launch it.
- 3. Launch the Pathways installer:
 - On a Windows host, run ALPathways_v1-0.exe.

- On a UNIX host, run **ALPathways_v1-0**.

Completing the Installer Wizard Pages

The installer wizard pages that appear vary according to the selections you choose. For more complete details on performing this task, see "Completing the Installer Wizard Pages" on page 4-3.

Restarting the Portal Application Server

Note: This step is required after you install portal files on the portal server.

To restart the application server, perform one of the following:

- If you are running on Java, restart the application server. Then redeploy your portal war or portal application server.
- If you are running on IIS, restart IIS.

Running the Security and Directory Service (SDS) Database Script

Caution: If you have installed Analytics 2.1, Ensemble 1.0, or any other product that utilizes the Security and Directory Service (SDS), and the SDS tables have been created in the ALI portal database, do not run the create tables script.

Instructions for updating the ALI portal database for Pathways and the SDS vary slightly depending on the type of database you have and whether or not the SDS has already been installed by another product.

- If the SDS has not already been installed by another product, run the SDS create tables script:
 - On SQL Server, run create_tables_mssql.sql as the portal database user. The script is located in install_dir\securityservice\1.0\sql\mssql\.
 - On Oracle, run **create_tables_oracle.sql** as the portal schema user. The script is located in *install_dir*\securityservice\1.0\sql\oracle\.
- If the SDS was installed by Analytics 2.1, run the SDS update tables script:
 - On SQL Server, run update_tables_mssql.sql as the portal database user. The script is located in install_dir\securityservice\1.0\sql\mssql\.

- On Oracle, run update_tables_oracle.sql as the portal schema user. The script is located in install_dir\securityservice\1.0\sql\oracle\.
- If the SDS was installed by Ensemble 1.0, the SDS database tables do not require any updates. Do not run either of the SDS database scripts.

For details on running the SDS database script, see "Running the Security and Directory Service (SDS) Database Script" on page 4-6.

Creating the Pathways Database

This section describes how to create the Pathways database on SQL Server 2000, SQL Server 2005, and Oracle. For more complete details on performing this task, see "Creating the Pathways Database" on page 4-8.

Creating the Pathways Database on SQL Server 2000

To create the Pathways database on SQL Server 2000:

- Copy the scripts from install_dir\pathways\1.0\sql\mssqlserver to the database host computer.
- Create the Pathways database user, configuring the Pathways database user to use SQL Server Authentication.
- 3. Create the Pathways database.
- 4. Grant the Pathways database user the **public** and **db owner roles** for the Pathways database.
- 5. On the Pathways database **Properties** | **Permissions** tab, grant the Pathways database user all permissions to the Pathways database.
- 6. As the Pathways database user, run the **create_pathways_schema.sql** script for the Pathways database, located in the *install dir*\pathways\1.0\sql\mssqlserver folder.
- 7. As the Pathways database user, run the **install_pathways_seeddata.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssqlserver folder.

Creating the Pathways Database on SQL Server 2005

To create the Pathways database on SQL Server 2005:

1. Copy the scripts from *install_dir*\pathways\1.0\sql\mssqlserver to the database host computer.

- Create the Pathways database user, configuring the Pathways database user to use SQL Server Authentication.
- 3. Create the Pathways database, assigning the Pathways database as the default database for the Pathways database user.
- 4. Grant the Pathways database user the **db owner** role for the Pathways database.
- Create the Pathways database schema. Specify the Pathways database user as the schema owner.
- 6. As the Pathways database user, run the **create_pathways_schema.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssqlserver\ folder.
- 7. As the Pathways database user, run the **install_pathways_seeddata.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssqlserver\ folder.

Creating the Pathways Database (Oracle)

- Copy the oracle directory from install_dir\pathways\1.0\sql\oracle\windows or install_dir/pathways/1.0/sql/oracle/unix to the Pathways database's host computer.
- 2. Log on to the host computer for the Pathways database as owner of the Oracle system files.
- 3. Run the following scripts against your Oracle database as **sysdba**:
 - a. Run the script **create_pathways_tablespaces.sql**.
 - **Note:** Before running the script, determine the name of the SID used in your portal database. If necessary, edit the script so that all SID name instances in the script match the SID name used for the portal database.
 - b. Run the script create_pathways_user.sql.
- 4. Execute the following steps as the **pathways** user, which you just created. The scripts that you run are located in the **oracle** directory that you copied in Step 1.
 - a. Run the script **create_pathways_schema.sql**.
 - b. Run the script install_pathways_seeddata.sql.

Creating the Rank Engine Database

This section describes how to create the Rank Engine database on SQL Server 2000, SQL Server 2005, and Oracle. For more complete details on performing this task, see "Creating the Rank Engine Database" on page 4-11.

Creating the Rank Engine Database on SQL Server 2000

To create the Rank Engine database on SQL Server 2000:

- Copy the scripts from install_dir\rankengine\1.0\sql\mssqlserver to the database host computer.
- Create the Rank Engine database user.
 Configure the Rank Engine database user to use SQL Server Authentication.
- 3. Create the Rank Engine database.
- 4. Assign the Rank Engine database as the default database for the Rank Engine database user.
- Grant the Rank Engine database user the public and db_owner roles for the Rank Engine database.
- 6. On the Rank Engine database **Properties** | **Permissions** tab, grant the Rank Engine database user all permissions to the Rank Engine database.
- 7. As the Rank Engine database user, run the **create_rankengine_schema.sql** script for the Rank Engine database, located in the *install dir*\rankengine\1.0\sql\mssqlserver folder.

Creating the Rank Engine Database on SQL Server 2005

To create the Rank Engine database on SQL Server 2005:

- 1. Copy the scripts from *install_dir*\rankengine\1.0\sql\mssqlserver to the database host computer.
- Create the Rank Engine database user. Configure the Rank Engine database user to use SQL Server Authentication.
- 3. Create the Rank Engine database, assigning the Rank Engine database as the default database for the Rank Engine database user.
- 4. Grant the Rank Engine database user the **db_owner** role for the Rank Engine database.

- Create the Rank Engine database schema. Specify the Rank Engine database user as the schema owner.
- 6. As the Rank Engine database user, run the **create_rankengine_schema.sql** script for the Rank Engine database, located in the *install_dir*\rankengine\1.0\sql\mssql\server folder.

Creating the Rank Engine Database on Oracle

To create the Rank Engine database on Oracle:

- Copy the oracle directory from install_dir\rankengine\1.0\sql\oracle\windows or install_dir/rankengine/1.0/sql/oracle/unix to the Rank Engine database's host computer.
- 2. Log on to the host computer for the Rank Engine database as owner of the Oracle system files.
- 3. Execute the following steps as the **system** user in your Oracle database:
 - a. Run the **create rankengine tablespaces.sql** script.

Note: Before running the script, determine the name of the SID used in your portal database. If necessary, edit the script so that all SID name instances in the script match the SID name used for the portal database.

b. Run the create_rankengine_user.sql script.

When running this script, you will be prompted to create the username and password for the Rank Engine database user. You will need to enter these values into Configuration Manager when configuring Rank Engine database settings.

- 4. Run the script **create_rankengine_schema.sql** as the Rank Engine database user that you just created.
- Run your database's analysis tool on the portal database to increase the efficiency of the database.

Configuring Pathways

You must use the Configuration Manager to configure database and connectivity settings on every computer on which you have installed Pathways components.

Access Configuration Manager by using the following URL:

https://localhost:port_number/cm/login.jsf.

Replace *port_number* with the port number used by Configuration Manager.

By default, Configuration Manager uses port number 12345. If you specified a port number other than 12345 on the Configuration Manager - Port and Password installation wizard page, use the port number that you specified.

On Windows, the Configuration Manager runs as the BEA AL Configuration Manager(*port_number*) service.

The default username for logging into Configuration Manager is **administrator**. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page when you installed Configuration Manager for the first time, either with Pathways, Ensemble, or Pages.

In Configuration Manager, enter the database and connectivity settings that you provisioned when you completed the Pathways Installation and Configuration Worksheets document. Online help is available in the Configuration Manager user interface.

Note: (Oracle only) When completing the Rank Engine Database component of Configuration Manager, make sure to follow these guidelines when completing the Index Tablespace configuration for Oracle: By default, this tablespace is named RANKENGINEINDEX. The name that you specify must match the value of the IDX_TBSP variable in the create_rankengine_tablespaces.sql script, located in install_dir/rankengine/version/sql/your_database_type/.

Starting the Portal

Start portal-related services. For information on starting the portal, see *AquaLogic Interaction Installation and Upgrade Guide*.

Note: Do not start the BEA ALI Search Service or BEA ALI Security and Directory Service yet. You will start these services after you register Pathways with the portal.

Registering Pathways with the Portal

This section describes how to register Pathways with the portal. For more complete details on performing this task, see "Registering Pathways with the Portal" on page 4-14.

To register Pathways objects with the portal, use the migration utility to import the migration package **pathways.pte**.

Note: You need to log out of the portal, then log back in for the **Pathways Administration** option to appear in the Select Utility menu.

Starting the Security and Directory Service (SDS) and Search Service

This section provides information on starting the Security and Directory Service (SDS) and Search Service. For more complete details on performing this task, see "Starting the Security and Directory Service (SDS) and Search Service" on page 4-15.

Starting the SDS and Search Service on Windows

To start the SDS and Search Service on Windows, start the following services:

- BEA ALI Security and Directory Service
- BEA ALI Search Service

Starting the SDS and Search Service on UNIX

To start the SDS and Search Service on UNIX, run the following commands from the command line:

- To start the BEA ALI Security and Directory daemon: install_dir/securityservice/1.0/bin/securityserviced.sh start
- To start the BEA ALI Search daemon: install_dir/searchservice/1.0/bin/searchservice.sh start

Starting Pathways

This section provides information on starting Pathways-related services. For more complete details on performing this task, see "Starting Pathways" on page 4-15.

Starting Pathways on Windows

To start Pathways on Windows, start the following services:

- BEA AL Pathways
- BEA AL Pathways Rank Engine

Starting Pathways on UNIX

To start Pathways on UNIX, run the following commands from the command line:

 To start the BEA AL Pathways daemon: install_dir/pathways/version/bin/pathwaysserverd.sh start To start the BEA AL Pathways Rank Engine daemon: install_dir/rankengine/version/bin/rankEngineService.sh start

Seeding the SDS Database with Pathways Capabilities and Roles

This section describes how to seed the Security and Directory Service database with Pathways capabilities and roles. For more complete details on performing this task, see "Seeding the SDS Database with Pathways Roles and Capabilities" on page 4-16.

To seed the Rank Engine database with initial data, choose **Pathways Administration** from the Select Utility menu. Performing this step automatically creates Pathways capabilities and default roles.

Installing and Configuring the Auto-Tag External Operation

If you want the Auto-Tag Engine to run periodically as an Automation Service job, you must install the Auto-Tag external operation on the Automation Service host. For more complete details on performing this task, see "Installing and Configuring the Auto-Tag External Operation" on page 4-16.

Note: This procedure is optional. If you do not perform this procedure, you can manually run the Auto-Tag Engine by clicking **Start** on the Tags tab, Auto-Tagging page in Pathways Administration. For details, see *AquaLogic Pathways Online Help*.

To install and configure the Auto-Tag external operation:

- 1. Log in to the Automation Service host computer as the local administrator (on Windows) or as a user with directory write privileges (on UNIX).
- 2. Copy the installer to the disk location from which you plan to launch it.
- 3. Launch the Pathways installer:
 - On a Windows host, run ALPathways v1-0.exe.
 - On a UNIX host, run ALPathways v1-0.
- 4. Complete the installer wizard pages:
 - Choose to perform a custom installation.
 - Choose to install the Pathways WebUI component only.

- 5. Launch Configuration Manager and enter database and connectivity settings into the Pathways application sections (you do not need to enter settings for the Rank Engine section). For details on launching and using Configuration Manager, see "Configuring Pathways" on page 3-6.
- 6. On the Automation Service host computer, copy the scripts located in *install_dir*|pathways|1.0\scripts to the following location: *install_dir*|ptportal\6.1\scripts.
- 7. Log in to the portal as a user with administrative privileges.
- 8. In Administration, use the migration utility to import the **pathways_autotags_extop.pte** migration package, located in: *install_dir*\pathways\1.0\serverpackages\ on the Pathways host.
- Edit the Pathways Auto-Tag external operation, located in the Pathways administrative folder.
- 10. In the **Operating System Command** box, perform the following:
 - (UNIX only) Change the extension of the PathwaysAutotag.bat file by replacing .bat with .sh.
 - If your API Service does not use the 11905 default port number, replace 11905 in < localhost: 11905> with the correct port number.
 - If your API Service is not installed on the same computer as the Automation Service that will be assigned to execute the external operation job, replace *localhost* in <*localhost:11905>* with the fully-qualified domain name.

You can now use the Automation Service utility to schedule a job that periodically runs the Auto-Tag Engine.

Adding Pathways Navigation Tags to the Portal Banner

Pathways is delivered with navigation tags that you can add to your portal banner to make Pathways' functionality more easily accessible. Using these navigation tags, you can add the following elements to the portal banner:

- Pathways search box
- Pathways search button
- A tab that navigates to the Pathways home page from the Directory tab

For details on adding Pathways navigation tags to the portal banner, see edocs.bea.com/alui/devdoc/docs60/Content Services/Customizing Plumtree Search/PathwaysNavigation Tags.htm .

To install Pathways portlet samples in your portal environment, import the **pathways_navigation_samples.pte** file included with the Pathways installation.

Making the Pathways User Profile Portlet Available to Users

To make the Pathways User Profile portlet available to end users, use the User Profile Manager to add the portlet to the General Information (Home) page. For more information on performing this task, see "Making the Pathways User Profile Portlet Available to Users" on page 4-18.

Note: This procedure is optional. If you do not want any of your users to view the data in this portlet, you do not need to perform this procedure. Note, however, that you can make this portlet available to some of your users by performing this procedure, then editing this portlet's security to specify the users and groups that can access this portlet. For details on managing portlet security, see the *AquaLogic Interaction Online Help*.

Note: Object security is respected in the Pathways User Profile portlet. Users are only allowed to see items and discussion messages that they have access to.

Accessing Pathways Administration Online Help

For the purposes of maintaining security, online help for Pathways Administration is accessible only from the Pathways Administration utility. When you launch online help from Pathways Administration pages, all content is displayed for Simple Mode and Enhanced Mode, in addition to Pathways Administration. The purpose of this is to provide you with details about using all of Pathways' functionality in one online help system.

To access online help from Pathways Administration:

- 1. Navigate to the Pathways Administration utility.
- Click ? on any of the Pathways Administration pages.
 The appropriate Pathways Administration help topic appears.

Configuring Content Upload for the Pathways Submit Page

To enable users to submit documents from their local file system using the Pathways Submit page, you must configure Pathways to use the Content Upload Content Source.

Quickstart Overview

For more information, see "Configuring Content Upload for the Pathways Submit Page" on page 4-20.

Installation

This chapter describes how to install Pathways.

To install Pathways:

- 1. Verify that you have met the prerequisites for installation. For details, see Installation Prerequisites.
- 2. Verify that you have already installed AquaLogic Interaction and AquaLogic Analytics 2.1.
- 3. Install Pathways components. For details, see "Installing Pathways Components" on page 4-2.
- 4. (**After installing portal files only**) Restart the portal application server. For details, see "Restarting the Portal Application Server" on page 4-6.
- 5. Update SDS tables in the portal database. For details, see "Creating the Pathways Database" on page 4-8.
 - **Note:** If AquaLogic Ensemble is currently installed, you do not need to perform this procedure.
- 6. Create the Pathways database. For details, see "Creating the Pathways Database" on page 4-8.
- 7. Create the Rank Engine database. For details, see "Creating the Rank Engine Database" on page 4-11.
- 8. Configure Pathways. For details, see "Configuring Pathways" on page 4-13.
- 9. Start the portal. For details, see "Starting the Portal" on page 4-14.

- 10. Register Pathways with the portal. For details, see "Registering Pathways with the Portal" on page 4-14.
- 11. Start the Security and Directory Service and Search Service. For details, see "Starting the Security and Directory Service (SDS) and Search Service" on page 4-15.
- 12. Start Pathways. For details, see "Starting Pathways" on page 4-15.
- 13. Seed the SDS database with Pathways roles and capabilities. For details, see "Seeding the SDS Database with Pathways Roles and Capabilities" on page 4-16.
- 14. (**optional**) Install and configure the Auto-Tag external operation. For details, see "Installing and Configuring the Auto-Tag External Operation" on page 4-16.
- 15. (**optional**) Add Pathways navigation tags to the portal banner. For details, see "Adding Pathways Navigation Tags to the Portal Banner" on page 4-18.
- 16. (**optional**) Make the Pathways User Profile portlet available to users. For details, see "Making the Pathways User Profile Portlet Available to Users" on page 4-18.
- 17. (**optional**) Access Pathways Administration online help. For details, see "Accessing Pathways Administration Online Help" on page 4-20.
- 18. (**optional**) Configure Content Upload for the Pathways Submit page. For details, see "Configuring Content Upload for the Pathways Submit Page" on page 4-20

Installing Pathways Components

This section discusses how to install Pathways components.

Launching the Pathways Installer

To launch the Pathways installer:

- 1. Log in to the remote server host computer as the local administrator (on Windows) or a user with directory write privileges (on UNIX).
- 2. Copy the installer to the disk location from which you plan to launch it.
- 3. Launch the Pathways installer:
 - On a Windows host, run ALPathways_v1-0.exe.
 - On a UNIX host, run ALPathways v1-0.

Completing the Installer Wizard Pages

Complete the installation wizard pages as described in the following table.

If you want to install all components on one computer, select **Complete** from the Install Set drop-down list. Otherwise, select **Custom**, then select the check box for each component that you want to install. The installer wizard pages that appear vary according to the selections you choose.

Table 4-1 Pathways Installer Wizard Pages

Wizard Page	Description
Introduction	This installer wizard page provides a brief description of the installer and describes how to run the installer in silent mode.
License Agreement	Read and accept the license agreement.

Table 4-1 Pathways Installer Wizard Pages

Wizard Page	Description		
Choose Components	You can choose the Pathways components you want to install. Each component can be installed on a separate server depending on your configuration.		
	The Pathways components are:		
	 Pathways Web UI: The core set of Web UI components that comprise the Pathways application. 		
	 Analytics Events for Pathways: Sends Analytics user activity data to Pathways. Install this component on the computer hosting Analytics services. 		
	 Pathways Rank Engine: Calculates the ActivityRank for each object in your system. 		
	 Portal Files: The necessary files to enable communication between the portal and Pathways. Install this component on the portal server. 		
	• Image Service Files: The necessary images, styles, user interface controls, Java applets, and online help for Pathways. Install this component on the computer hosting the computer hosting the Image Service.		
	 Search Service: Installs the Windows service called the BEA ALI Search Service, which facilitates communication with the portal's Search server. 		
	• Security and Directory Service: Installs the Security and Directory Service.		
	Note: Do not install the Security and Directory Service if it is already installed in your environment. If you have installed AquaLogic Ensemble, you might have already installed the Security and Directory Service.		
	After you have chosen the components you want to install, click Next.		
License Directory	Specify the path to the location where you want to store the evaluation version of the license.bea file. This location must be in BEA_HOME. The default location of BEA_HOME is:		
	• C:\bea (Windows)		
	• /opt/bea (UNIX)		

Table 4-1 Pathways Installer Wizard Pages

Wizard Page	Description
Existing License Update	This page appears if a license.bea file exists in the location specified in the License Directory page.
	Select Merge License to merge an Evaluation license with the existing license.
	Select Overwrite License to overwrite the existing license with an Evaluation license. The installer will place a backup of the existing license in BEA_HOME.
	Select Leave Alone to leave the existing license.
	For more complete details on license types and combining license keys, see Appendix B, "Licensing."
Configuration Manager - Port and Password	Type the port number on which you want Configuration Manager to service Pathways requests.
	By default, the port number is 12345. After running the installer, you will be able to access Configuration Manager by using the following URL: https://localhost: <i>port_number</i> /cm/login.jsf.
	Also type and confirm the Administrator password that you will use to log into Configuration Manager. The password is case-sensitive.
Choose Install Folder	The default installation folder is:
	• C:\bea\alui (Windows)
	• /opt/bea/alui (UNIX)
	Note: In the rest of this guide, the Pathways installation folder is referred to as <i>install_dir</i> .
	After you have entered the required information or accepted the default, click ${\bf Next}$.
Path to Image Service Files	Install Image Service files on the computer on which the Image Service is installed. The path should lead to the directory where the Image Service is installed.
	• C:\bea\alui\ptimages (Windows)
	• /opt/bea/alui/ptimages (UNIX)
	Before clicking Next , verify that security for the Image Service directory is appropriately configured to allow for installation of the Image Service files.
	After you have entered the required information, click Next.

Table 4-1 Pathways Installer Wizard Pages

Wizard Page	Description
Path to Portal Files	Install portal files on the portal server. The path should lead to the directory where the portal is installed. • C:\bea\alui\ptportal\6.1 (Windows) • /opt/bea/alui/ptportal/6.1 (UNIX)
	Note: After installing portal files, you must restart the portal application server and, if you are running on Java, redeploy your portal.war and portal.ear files. For details, see "Restarting the Portal Application Server" on page 4-6.
Path to Analytics Files	Install Analytics files on the computer on which Analytics 2.1 is installed. The path should lead to the directory where Analytics 2.1 is installed. C:\bea\alui\ptanalytics\2.1 (Windows) /opt/bea/alui/ptanalytics/2.1 (UNIX)
Install Complete	This screen appears after the installer has finished. It includes the URL you use to launch the Configuration Manager. You must reboot the system before continuing to the next procedure. After you have made a selection, click Yes, restart my system .

Restarting the Portal Application Server

Note: This step is required after you install portal files on the portal server.

To restart the application server, perform one of the following:

- If you are running on Java, restart the application server. Then redeploy your portal war or portal ear file to your portal application server.
- If you are running on IIS, restart IIS.

Running the Security and Directory Service (SDS) Database Script

The Security and Directory Service (SDS) requires additional tables in the AquaLogic Interaction portal database.

Caution: If you have installed Analytics 2.1, Ensemble 1.0, or any other product that utilizes the SDS, and the SDS tables are already created in the ALI portal database, do not run the create tables script. It will drop and re-create the SDS tables along with the data, potentially breaking other applications.

Instructions for updating the ALI portal database for Pathways and the SDS vary slightly depending on the type of database you have and whether or not the SDS has already been installed by another product.

On SQL Server:

- If the SDS has not already been installed by another product, the SDS tables must be created. For details, see "Running the SDS Database Script on SQL Server for a New Install of the SDS" on page 4-7.
- If the SDS was installed by Analytics 2.1, the SDS tables must be updated. For details, see "Running the SDS Database Script on SQL Server for an Existing Install of the SDS" on page 4-8.
- If the SDS was installed by Ensemble 1.0, no additional steps are necessary. Do not run either of the SDS database scripts.

On Oracle:

- If the SDS has not already been installed by another product, the SDS tables must be created. For details, see "Running the SDS Database Script on Oracle for a New Install of the SDS" on page 4-8.
- If the SDS was installed by Analytics 2.1, the SDS tables must be updated. For details, see "Running the SDS Database Script on Oracle for an Existing Install of the SDS" on page 4-8.
- If the SDS was installed by Ensemble 1.0, no additional steps are necessary. Do not run either of the SDS database scripts.

Running the SDS Database Script on SQL Server for a New Install of the SDS

To run the SDS database script on SQL Server:

- 1. Copy the **create_tables_mssql.sql** script from *install_dir*\securityservice\1.0\sql\mssql\ to the portal database host machine.
- 2. As the portal database user, run the **create tables mssql.sql** script on the portal database.

Running the SDS Database Script on Oracle for a New Install of the SDS

To run the SDS database script on Oracle:

- 1. Copy the **create_tables_oracle.sql** script from *install_dir*\securityservice\1.0\sql\oracle\ to the portal database host machine.
- 2. As the portal schema user, run the **create_tables_oracle.sql** script on the portal database.

Running the SDS Database Script on SQL Server for an Existing Install of the SDS

To run the SDS database script on SQL Server:

- 1. Copy the **update_tables_mssql.sql** script from *install_dir*\securityservice\1.0\sql\mssql\ to the portal database host machine.
- 2. As the portal database user, run the **update_tables_mssql.sql** script on the portal database.

Running the SDS Database Script on Oracle for an Existing Install of the SDS

To run the SDS database script on Oracle:

- 1. Copy the **update_tables_oracle.sql** script from *install_dir*\securityservice\1.0\sql\oracle\ to the portal database host machine.
- 2. As the portal schema user, run the **update_tables_oracle.sql** script on the portal database.

Creating the Pathways Database

This section describes how to create the Pathways database. It contains the following sections:

- Creating the Pathways Database on SQL Server 2000
- Creating the Pathways Database on SQL Server 2005
- Creating the Pathways Database on Oracle

Creating the Pathways Database on SQL Server 2000

To create the Pathways database on SQL Server 2000:

- Copy the scripts from install_dir\pathways\1.0\sql\mssqlserver to the database host computer.
- Create the Pathways database user, configuring the Pathways database user to use SQL Server Authentication.
- 3. Create the Pathways database.
 - Make sure to configure the size of the Pathways database. The growth of the database is directly correlated to the number of objects present in the system. Objects include such things as tags, user preferences, and saved searches. Estimate 10 MB of growth per 100,000 objects. For example, if the Pathways database stores roughly 100,000 new objects per day, you should anticipate growth of 3.65 GB per year.
- 4. Grant the Pathways database user the **public** and **db_owner roles** for the Pathways database.
- 5. On the Pathways database **Properties** | **Permissions** tab, grant the Pathways database user all permissions to the Pathways database.
- 6. As the Pathways database user, run the **create_pathways_schema.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssql\server\ folder.
- 7. Run the **install_pathways_seeddata.sql** script for the Pathways database, located in the *install dir*\pathways\1.0\sql\mssql\server\ folder.

Creating the Pathways Database on SQL Server 2005

To create the Pathways database on SQL Server 2005:

- 1. Copy the scripts from *install_dir*\pathways\1.0\sql\mssqlserver to the database host computer.
- Create the Pathways database user, configuring the Pathways database user to use SQL Server Authentication.
- 3. Create the Pathways database with the following properties:
 - Configure the size of the Pathways database. The growth of the database is directly correlated to the number of objects present in the system. Objects include such things as tags, user preferences, and saved searches. Estimate 10 MB of growth per 100,000

- objects. For example, if the Pathways database stores roughly 100,000 new objects per day, you should anticipate growth of 3.65 GB per year.
- Change the default database for the Pathways database user to the Pathways database.
- 4. Grant the Pathways database user the **db_owner** role for the Pathways database.
- Create the Pathways database schema. Specify the Pathways database user as the schema owner.
- 6. As the Pathways database user, run the **create_pathways_schema.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssqlserver folder.
- 7. Run the **install_pathways_seeddata.sql** script for the Pathways database, located in the *install_dir*\pathways\1.0\sql\mssqlserver folder.

Creating the Pathways Database on Oracle

To create the Pathways database on Oracle:

- Copy the oracle directory from install_dir\pathways\1.0\sql\oracle\windows or install_dir/pathways/1.0/sql/oracle/unix to the Pathways database's host computer. This folder contains the scripts that you will use to set up and configure the Pathways Database.
- 2. Log on to the host computer for the Pathways database as owner of the Oracle system files.
- 3. Execute the following steps as the **system** user in your Oracle database.
 - a. Run the script **create_pathways_tablespaces.sql** for your platform. This file is located in a platform specific subdirectory within the **oracle** directory that you copied in Step 1.
 - **Note:** Before running the script, determine the name of the SID used in your portal database. If necessary, edit the script so that all SID name instances in the script match the SID name used for the portal database.
 - b. Run the script **create pathways user.sql**.
- 4. Execute the following steps as the **pathways** user that you just created.
 - a. Run the script **create_pathways_schema.sql**. This script creates all of the tables and indexes that are necessary to run Pathways. The create_pathways_schema.sql script is located in the **oracle** directory that you copied in Step 1.
 - b. Run the script **install_pathways_seeddata.sql**. This script adds all of the initial seed data that are necessary to run the Pathways product. The install_pathways_seeddata.sql script is located in the **oracle** directory that you copied in Step 1.

Run your database's analysis tool on the portal database to increase the efficiency of the database.

Creating the Rank Engine Database

This section describes how to create and set up the Rank Engine database. It contains the following sections:

- Creating the Rank Engine Database on SQL Server 2000
- Creating the Rank Engine Database on SQL Server 2005
- Creating the Rank Engine Database on Oracle

Creating the Rank Engine Database on SQL Server 2000

To create the Rank Engine database on SQL Server 2000:

- Copy the scripts from install_dir\rankengine\1.0\sql\mssqlserver to the database host computer.
- 2. Create the Rank Engine database user, configuring the Rank Engine database user to use SQL Server Authentication.
- 3. Create the Rank Engine database with the following properties:
 - Make sure to configure the size of the Rank Engine database. The growth of the database is directly correlated to the number of objects present in the system to which an ActivityRank is assigned. Estimate 10 MB of growth per 100,000 objects. For example, if the Rank Engine database stores roughly 100,000 new objects per day, you should anticipate growth of 3.65 GB per year.
- Grant the Rank Engine database user the public and db_owner roles for the Rank Engine database.
- 5. On the Rank Engine database **Properties** | **Permissions** tab, grant the Rank Engine database user all permissions to the Rank Engine database.
- 6. As the Rank Engine database user, run the **create_rankengine_schema.sql** script for the Rank Engine database, located in the *install_dir*\rankengine\1.0\sql\mssql\server folder.

Creating the Rank Engine Database on SQL Server 2005

To create the Rank Engine database on SQL Server 2005:

- 1. Copy the scripts from *install_dir*\rankengine\1.0\sql\mssqlserver to the database host computer.
- Create the Rank Engine database user, configuring the Rank Engine database user to use SQL Server Authentication.
- 3. Create the Rank Engine database with the following properties.
 - Configure the size of the Rank Engine database. The growth of the database is directly correlated to the number of objects present in the system to which an ActivityRank is assigned. Estimate 10 MB of growth per 100,000 objects. For example, if the Rank Engine database stores roughly 100,000 new objects per day, you should anticipate growth of 3.65 GB per year.
 - Change the default database for the Rank Engine database user to the Rank Engine database.
- 4. Grant the Rank Engine database user the **db owner** role for the Rank Engine database.
- Create the Pathways database schema. Specify the Pathways database user as the schema owner.
- 6. As the Rank Engine database user, run the **create_rankengine_schema.sql** script for the Rank Engine database, located in the *install_dir*\rankengine\1.0\sql\mssql\server folder.

Creating the Rank Engine Database on Oracle

To create and set up the Rank Engine database on Oracle:

- Copy the oracle directory from install_dir\rankengine\1.0\sql\oracle\windows or install_dir\rankengine\1.0\sql\oracle\unix to the Rank Engine database's host computer. This folder contains the scripts that you will use to set up and configure the Rank Engine Oracle Database.
- 2. Log on to the host computer for the Rank Engine database as owner of the Oracle system files.
- 3. Execute the following steps as the **system** user in your Oracle database.
 - a. Run the script **create_rankengine_tablespaces.sql** for your platform. This file is located in a platform specific subdirectory within the **oracle** directory that you copied in Step 1.

Note: Before running the script, determine the name of the SID used in your portal database. If necessary, edit the script so that all SID name instances in the script match the SID name used for the portal database.

- b. Run the script **create_rankengine_user.sql** for your platform. This file is located in a platform specific subdirectory within the **oracle** directory that you copied in Step 1.
 - When running this script, you will be prompted to create the username and password for the Rank Engine database user. You will need to enter these values into Configuration Manager when configuring Rank Engine database settings.
- c. Create the Rank Engine database user, including its username and password.
- 4. As the Rank Engine database user that you just created run the script **create_rankengine_schema.sql**.

This script creates all of the tables and indexes that are necessary to run the Rank Engine. The create_rankengine_schema.sql script is located in the **oracle** directory that you copied in Step 1.

Run your database's analysis tool on the portal database to increase the efficiency of the database.

Configuring Pathways

You must use the Configuration Manager to configure database and connectivity settings on every computer on which you have installed Pathways components.

Access Configuration Manager by using the following URL:

https://localhost:port number/cm/login.jsf.

Replace *port_number* with the port number used by Configuration Manager.

By default, Configuration Manager uses port number 12345. If you specified a port number other than 12345 on the Configuration Manager - Port and Password installation wizard page, use the port number that you specified.

The default username for logging into Configuration Manager is **administrator**. Use the password that you typed into the Configuration Manager - Port and Password installation wizard page.

In Windows, the Configuration Manager runs as the BEA AL Configuration Manager(*port_number*) service.

In Configuration Manager, enter the database and connectivity settings that you provisioned when you completed the Pathways Installation and Configuration Worksheets document. Online help is available in the Configuration Manager user interface.

Note: (Oracle only) When completing the Rank Engine Database component of Configuration Manager, make sure to follow these guidelines when completing the Index Tablespace

configuration for Oracle: By default, this tablespace is named RANKENGINEINDEX. The name that you specify must match the value of the IDX_TBSP variable in the create_rankengine_tablespaces.sql script, located in <code>install_dir/rankengine/version/sql/database/</code>.

Starting the Portal

Start portal-related services. For information on starting the portal, see *AquaLogic Interaction Installation and Upgrade Guide*.

Note: Do not start the BEA ALI Search Service or BEA ALI Security and Directory Service yet. You will start these services after you register Pathways with the portal.

Registering Pathways with the Portal

To register the Pathways objects with the portal:

- 1. Log into the Administrator Portal.
- 2. Click **Administration**.
- 3. From the Select Utility drop-down choose **Migration Import**.
- 4. Browse to select the location of the migration package. If you accepted installation defaults, the location on the Pathways host is: *install dir*\pathways\1.0\serverpackages\pathways.pte
- 5. Click Load Package.
- 6. Perform one of the following:
 - If you are importing the migration package for the first time, keep the default selections under Import Settings. The default selections are Import ACLs and Remember Dependency Settings.
 - If you have previously imported the migration package and you are installing Pathways
 on a different server or to use a different port than previous installations, keep the
 default selections and check the box next to Overwrite Remote Servers.
- 7. Click **Portal Resources** on the left hand side of the Migration editor.
- 8. Select the objects that you want to import.
- 9. Click Finish.

Note: You need to log out of the portal, then log back in for the **Pathways Administration** option to appear in the Select Utility menu.

Starting the Security and Directory Service (SDS) and Search Service

This section provides information on starting the Security and Directory Service (SDS) and Search Service. Perform the procedure that is appropriate to your operating system.

Starting the SDS and Search Service on Windows

To start the SDS and Search Service on Windows:

- 1. From the Windows Control Panel, click **Administrative Tools** | **Services**.
- 2. Right-click the **BEA ALI Security and Directory Service**.
- 3. Choose **Start**.
- 4. Right-click the **BEA ALI Search Service**.
- Choose Start.

Starting the SDS and Search Service on UNIX

To start the SDS and Search Service on UNIX, run the following commands from the command line:

- To start the BEA ALI Security and Directory daemon: install_dir/securityservice/1.0/bin/securityserviced.sh start
- To start the **BEA ALI Search daemon:** install_dir/searchservice/1.0/bin/searchservice.sh start

Starting Pathways

This section provides information on starting Pathways-related services. Perform the procedure that is appropriate to your operating system.

Starting Pathways on Windows

To start Pathways on Windows:

- 1. From the Windows Control Panel, click **Administrative Tools** | **Services**.
- 2. Right-click the **BEA AL Pathways** service.
- 3. Right-click the BEA AL Pathways Rank Engine service.
- 4. Choose Start.

Starting Pathways on UNIX

To start Pathways on UNIX, run the following commands from the command line:

- To start the BEA AL Pathways daemon: install_dir/pathways/version/bin/pathwaysserverd.sh
- To start the BEA AL Pathways Rank Engine daemon: install_dir/rankengine/version/bin/rankEngineService.sh

Seeding the SDS Database with Pathways Roles and Capabilities

To seed the Security and Directory Service database with Pathways roles and capabilities, you only need to access Pathways Administration the first time after installation. To do so:

- 1. Log in to the portal.
- 2. Click **Administration**.
- 3. From the Select Utility menu, choose **Pathways Administration**.

Performing this step automatically creates Pathways capabilities and default roles.

Installing and Configuring the Auto-Tag External Operation

If you want the Auto-Tag Engine to run periodically as an Automation Service job, you must install the Auto-Tag external operation on the Automation Service host.

Note: This procedure is optional. If you do not perform this procedure, you can manually run the Auto-Tag Engine by clicking **Start** on the Tags tab, Auto-Tagging page in Pathways Administration. For details, see *AquaLogic Pathways Online Help*.

To install and configure the Auto-Tag external operation:

- 1. Log in to the Automation Service host computer as the local administrator (on Windows) or as a user with directory write privileges (on UNIX).
- 2. Copy the installer to the disk location from which you plan to launch it.
- 3. Launch the Pathways installer:
 - On a Windows host, run ALPathways v1-0.exe.
 - On a UNIX host, run ALPathways v1-0.
- 4. Complete the installer wizard pages:
 - Choose to perform a custom installation.
 - Choose to install the Pathways WebUI component only.

Note: You only need to install the Pathways WebUI component to install the Auto-Tag external operation, which is included in the Pathways WebUI component. You do not need to use the Pathways user interface on the Automation Service host computer.

- 5. Launch Configuration Manager and enter database and connectivity settings into the Pathways application sections (you do not need to enter settings for the Rank Engine section). For details on launching and using Configuration Manager, see "Configuring Pathways" on page 4-13.
- 6. On the Automation Service host computer, copy the scripts located in *install_dir*\pathways\1.0\scripts to the following location: *install_dir*\pathways\1.0\scripts.
- 7. Log in to the portal as a user with administrative privileges.
- In Administration, use the migration utility to import the pathways_autotags_extop.pte
 migration package, located in install_dir\pathways\1.0\serverpackages on the Pathways
 host.
- Edit the Pathways Auto-Tag external operation, located in the Pathways administrative folder.
- 10. In the **Operating System Command** box, perform the following:
 - (UNIX only) Change the extension of the PathwaysAutotag.bat file by replacing .bat with .sh.
 - If your API Service does not use the 11905 default port number, replace 11905 in <localhost: 11905 with the correct port number.

If your API Service is not installed on the same computer as the Automation Service that will be assigned to execute the external operation job, replace *localhost* in <*localhost:11905>* with the fully-qualified domain name.

You can now use the Automation Service utility to schedule a job that periodically runs the Auto-Tag Engine.

Adding Pathways Navigation Tags to the Portal Banner

Pathways is delivered with navigation tags that you can add to your portal banner to make Pathways' functionality more easily accessible. Using these navigation tags, you can add the following elements to the portal banner:

- Pathways search box
- Pathways search button
- A tab that navigates to the Pathways home page from the Directory tab

Note: This procedure is optional; you do not need to add Pathways navigation tags to complete the installation of Pathways.

For details on adding Pathways navigation tags to the portal banner, see edocs.bea.com/alui/devdoc/docs60/Content Services/Customizing Plumtree Search/PathwaysNavigation Tags.htm .

To install Pathways portlet samples in your portal environment, import the **pathways_navigation_samples.pte** file included with the Pathways installation.

Making the Pathways User Profile Portlet Available to Users

The Pathways User Profile portlet lets users view:

- Items that a user has submitted to the Knowledge Directory or uploaded to a Collaboration project
- Discussion messages that a user has posted to a Collaboration discussion

Note: This procedure is optional. If you do not want any of your users to view the data in this portlet, you do not need to perform this procedure. Note, however, that you can make this portlet available to some of your users by performing this procedure, then editing this

portlet's security to specify the users and groups that can access this portlet. For details on managing portlet security, see *AquaLogic Interaction Online Help*.

Note: Object security is respected in the Pathways User Profile portlet. Users are only allowed to see items and discussion messages that they have access to.

To make the Pathways User Profile portlet available to end users, you must use the User Profile Manager to add the portlet to the General Information (Home) page. After you perform this procedure, users can view their own Pathways User Profile portlet by clicking **My Account**, then clicking **View User Profile**.

To make the Pathways User Profile portlet available to users, perform the following:

1. Navigate to Administration.

The Admin Objects Directory appears.

2. From the Select Utility menu, select **User Profile Manager**.

The User Profile Manager appears.

3. Click General Information (Home) page.

The Edit Page: General Information page appears.

4. Click **Add Portlets**.

The Add Portlets: General Information page appears.

5. Select Pathways User Profile Portlet.

6. Click Finish.

You are returned to the Edit Page: General Information page.

7. Click Finish.

You are returned to the User Profile Manager.

8. Click Finish.

You are returned to the Admin Objects Directory.

For more information on the Pathways User Profile portlet, see *AquaLogic Pathways Online Help*.

Accessing Pathways Administration Online Help

This section discusses how to access Pathways Administration online help.

Note: This section is for your information only; you do not need to access Pathways Administration online help to complete the installation of Pathways.

AquaLogic Pathways is delivered with three separate online help systems. One online help system exists for each user interface: Simple Mode, Enhanced Mode, and Pathways Administration.

Online help launched from Pathways pages in Simple Mode describes how to use Pathways in Simple Mode only. Online help launched from Pathways pages in Enhanced Mode describes how to use Pathways in Enhanced Mode only.

For the purposes of maintaining security, online help for Pathways Administration is only accessible from the Pathways Administration utility. When you launch online help from Pathways Administration pages, all content is displayed for Simple Mode and Enhanced Mode, in addition to Pathways Administration. The purpose of this is to provide you with details about using all of Pathways' functionality in one online help system.

To access online help from Pathways Administration:

- 1. Navigate to the Pathways Administration utility.
- 2. Click ? on any of the Pathways Administration pages.

The appropriate Pathways Administration help topic appears.

Configuring Content Upload for the Pathways Submit Page

The Aqualogic Pathways Submit page allows users to upload new content manually to the Aqualogic Interaction Knowledge Directory. This page enables you to tag a document as it is submitted, rather than submitting the document through the Knowledge Directory's user interface and then finding the document using Pathways search and tagging it.

By default, the Submit page allows uploads only through the built-in WWW Content Source ("World Wide Web" option). This section describes how to configure Pathways to allow users to submit documents from their local file system as well, using the Content Upload Content Source.

This section contains the following task subsections, in the order in which you should perform them:

- 1. Prerequisites.
- 2. Locating the Content Upload Web Service URL and Content Source ID.
- 3. Configuring Content Upload for Pathways.

Prerequisites

You must complete the following steps before configuring content upload for the Pathways Submit page:

- Verify that the Content Upload Service is installed with your AquaLogic Interaction installation.
- 2. Verify that the "contentupload.pte" server package file has been imported into your portal.

For more information, see the Installation Guide for AquaLogic Interaction.

Locating the Content Upload Web Service URL and Content Source ID

To locate the Content Upload Web Service URL and Content Source ID:

- 1. Log into the portal.
- 2. Click **Administration**.
- 3. Open the **Portal Resources** folder.
- Expand the Web Service category and click Content Upload Web Service to open the Content Web Service editor.
- On the Main Settings page, under Content Web Service Settings, view and note the Upload URL.

It should look something like this:

http://server name:11910/ptupload/upload.

- 6. Click **Cancel** to exit the Content Web Service editor and return to the Administration directory.
- 7. In the **Portal Resources** folder, expand the **Content Source** category.
- 8. Click **Content Upload** to open the Remote Content Source editor.

9. On the Properties and Names page of the Remote Content Source editor, view and note the **Object ID** value.

This number is the "Content Source ID" that you will use when configuring the content source in Pathways.

Configuring Content Upload for Pathways

To configure content upload for Pathways:

- Log into the AquaLogic Configuration Manager.
 For more information, see "Configuring Pathways" on page 4-13.
- 2. In the Pathways section, select **Content Sources.**
- 3. Select **Enable Portal Upload** to make the Content Upload settings appear.
- 4. In the **Portal Upload Content Source ID** field, enter the Content Source ID that you noted in step 9 above.
- 5. In the **Portal Upload Service URL** field, enter the Upload URL that you noted in step 5 above.
- 6. Click **Save** to store the settings.
- 7. Restart Pathways.

The Pathways Submit page will now enable users to submit documents using both the World Wide Web option and the My Computer (content upload) option.

Upgrade

This chapter describes the process of upgrading from a previous version of Pathways to the current version.

Upgrading from Pathways 1.0 to Pathways 1.0 MP1

To upgrade from Pathways 1.0 to Pathways 1.0 MP1:

1. Back up your existing Pathways installation directories for the Pathways WebUI, Pathways RankEngine, and Search Service.

By default, these directories are located in the following locations:

 $Pathways \ WebUI: \verb|C:\bea|| alui \verb|pathways||$

Pathways RankEngine: C:\bea\alui\rankengine

Search Service: C:\bea\alui\searchservice

2. Run the Pathways installer.

For details, see "Launching the Pathways Installer" on page 4-2.

When upgrading to the maintenance pack, it is only necessary to select the following options in the installer:

- a. Pathways Web UI
- b. Pathways Rank Engine
- c. Image Service Files

d. Search Service

Note: New installations should follow the complete installation instructions described in Chapter 4, "Installation."

Troubleshooting

This appendix provides information on troubleshooting the installation and configuration process. It includes the following topics:

- Overview of Logs
- Troubleshooting Common Installation Problems
- Using the Logging Utilities

Overview of Logs

This section provides the descriptions and locations of logs that you can use to troubleshoot the Pathways installation and Pathways in runtime. Individual log files are generated for each day's activity.

Installation Logs

Table A-1 Logs Used to Troubleshoot the Installation of Pathways

Log	Description	Default Location and Platform
AquaLogic_Pathways_InstallLog.log	Provides activity and error details for the installation of the main Pathways UI files.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)
AquaLogic_pathways_analytics_pathways_de ployment.log	Provides activity and error details for the installation of the files required for integrating Pathways with Analytics.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)
AquaLogic_pathways_deployment.log	Provides activity and error details for the installation of the main Pathways UI files.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)
AquaLogic_pathways_portal_deployment.log	Provides activity and error details for the installation of the files required for integrating Pathways with the portal.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)
AquaLogic_rankengine_deployment.log	Provides activity and error details for the installation of the Rank Engine files.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)

Table A-1 Logs Used to Troubleshoot the Installation of Pathways

Log	Description	Default Location and Platform
AquaLogic_searchservice_deployment.log	Provides activity and error details for the installation of the files required for integrating Pathways with the Search Service.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)
AquaLogic_securityservice_deployment.log	Provides activity and error details for the installation of the files required for integrating Pathways with the Security and Directory Service.	 install_dir\installlogs (Windows) install_dir/installlogs (UNIX)

Runtime Logs

Table A-2 Logs Used to Troubleshoot Pathways in Runtime

Log	Description	Default Location and Platform
wrapper.log	Provides additional activity and error details for the BEA AL Pathways service, including details for these user interfaces: • Simple UI • Enhanced UI • Pathways Administration	 install_dir\pathways\1.0\logs (Windows) install_dir/pathways/1.0/logs (UNIX)

Individual log files are generated for each day's activity.

Troubleshooting Common Installation Problems

The table in this section describes common installation and configuration problems and provides solutions to them.

Tip: To find the version number of your Pathways application, use the following URL: http://pathways_server_name:port_number/graffiti/ajax/version.do

Table A-3 Common Installation and Configuration Problems and Solutions

Problem Description and Details		Cause and Solution	
•	Problem: The Submit a Document link does not appear on the Search page. Details: Users cannot submit documents and Web pages, because they cannot access the Submit page.	 Cause: The settings in the Content Sources component for Pathways was either not configured or not correctly configured in Configuration Manager. Solution: Correctly configure the settings in the Content Sources component for Pathways in Configuration Manager. 	
•	Problem: Security and Directory Service is consuming too much CPU.	Solution: Reduce the number of calls made to the Security and Directory Service by increasing the expiration time of login tokens. To do so, change the setting for the wsserver.DefaultSessionDurationInMinutes node in serverconfig.xml as desired.	

Using the Logging Utilities

When the Pathways portlets or the Pathways Administration UI display either an error or the Pathways diagnostic checks, one or more of the required services or Pathways itself may not be configured correctly. Use the AquaLogic Interaction Logging Utilities to help identify the specific issue by enabling Pathways and the required services as message senders within Logging Spy.

For more information about the Logging Utilities, see the Logging Utilities documentation at edocs.bea.com/alui/devtools.

Licensing

This appendix describes how licensing is configured for Pathways. It contains the following sections:

- Licensing Overview
- Installation Behavior
- Upgrading an Existing License
- Merging License Keys

Licensing Overview

In order to function, Pathways requires a valid license key on the computer on which Pathways is installed. The license file containing this key must be located in the BEA_HOME directory.

By default, BEA_HOME is

• Unix: /opt/bea

• Windows: C:\bea

Depending on your use case, a different type of license is used. Each license type is defined by the license attributes that govern the behavior of the licensed installation. The following table lists

the license types, the most important attribute for each type, and how the license should be obtained.

Table B-1 Use Cases and Corresponding License Types

License Type	Key Attribute	Obtainment Method
Standard Evaluation	Session Limit: Standard Evaluation licenses will allow up to 5 concurrent user sessions.	Standard Evaluation licenses are automatically generated by the Pathways installer.
Extended Evaluation	Expiration: Extended Evaluation licenses expire on a specific date.	Extended Evaluation licenses are obtained by contacting a BEA sales representative.
Production	IP: Product licenses are only valid on a specific IP or within a specific IP range.	Existing customers can obtain Product licenses through elicense.bea.com or licensing@bea.com.

Installation Behavior

By default, the installer attempts to install a Standard Evaluation license file containing a Pathways key in the BEA_HOME directory.

If a license bea file exists in the specified location, then the installer prompts you to merge a Standard Evaluation license with the existing license, overwrite the existing license with a Standard Evaluation license, or leave the existing license alone. If you elect to overwrite the existing license, then the installer places a backup of the existing license into the BEA_HOME directory.

If you are installing Pathways on a machine with another BEA product on it (for example, BEA WebLogic Server, AquaLogic Analytics, or AquaLogic Interaction Collaboration), choose to merge the license files when prompted by the installer.

Upgrading an Existing License

If you are upgrading an existing license to an Extended Evaluation license or a Production license, you can either combine the license keys or replace the existing license file with the new license file.

If you are upgrading a license on a machine with another BEA product on it (for example, BEA WebLogic Server, AquaLogic Analytics, or AquaLogic Interaction Collaboration), you must merge the license keys for both products into a single file. For more information on merging license keys, see "Merging License Keys."

Merging License Keys

To manually combine two or more license keys into the license.bea file, either use a text editor or the tool provided in BEA_HOME.

By default:

- Unix: BEA HOME/UpdateLicense.sh
- Windows: BEA_HOME\UpdateLicense.cmd

The path to java.exe must be in the PATH variable. Use the following command to execute the tool:

- Unix: ./UpdateLicense.sh new_license_file
- Windows: UpdateLicense.cmd new_license_file

Replace new_license_file with the name of the file containing the license key you wish to add to license.bea.

Licensing

Uninstalling Pathways

This appendix discusses how to uninstall Pathways.

Uninstalling Pathways on UNIX

To uninstall Pathways on UNIX platforms, launch the uninstaller for Pathways 1.0 by running <code>install_dir/pathways/uninstall/pathways/version/uninstallAquaLogic_Pathways</code>

Uninstalling Pathways on Windows

To uninstall Pathways on Windows:

Use the Windows Control Panel Add/Remove Program utility to launch the AquaLogic Pathways uninstall wizard.

Uninstalling Pathways

Index

A

administration online help	license file
accessing 4-20	installing B-2
Auto-Tag external operation	merging license keys B-3
installing 4-16	upgrading B-3
	license keys
n	merging B-3
В	license types
BEA_HOME default location 4-4	extended evaluation B-2 production B-2
C	standard evaluation B-2
	license.bea B-2
capabilities	logs A-1
seeding SDS database 4-16	3.6. 1. 1
Configuration Manager 4-13	••
Content Upload, configuring 4-20	M
	My Computer option on the Submit page 4-20
D	
defaulte	N
defaults	N
BEA_HOME 4-4	navigation tags
BEA_HOME 4-4 Configuration Manager port number 4-5	
BEA_HOME 4-4	navigation tags
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5	navigation tags adding 4-18
BEA_HOME 4-4 Configuration Manager port number 4-5	navigation tags adding 4-18
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E	navigation tags adding 4-18 Oracle database
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations	navigation tags adding 4-18
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E	navigation tags adding 4-18 O Oracle database creating 3-6
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations	navigation tags adding 4-18 Oracle database
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations	navigation tags adding 4-18 O Oracle database creating 3-6
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations	navigation tags adding 4-18 O Oracle database creating 3-6 P Pathways
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations installing 4-16	navigation tags adding 4-18 O Oracle database creating 3-6 P Pathways configuring 4-13
BEA_HOME 4-4 Configuration Manager port number 4-5 Pathways installation directory 4-5 E external operations installing 4-16 I installer file 4-2	navigation tags adding 4-18 O Oracle database creating 3-6 P Pathways

L

installer wizard pages 4-3 starting 4-15 uninstalling C-1 version number A-4 Pathways Administration accessing online help 4-20 Pathways database creating 4-8 Pathways User Profile Portlet 3-11, 4-18 pathways_navigation_samples.pte 4-18 portal restarting application server 4-6 starting 4-14	U UpdateLicense.cmd merging license keys on Windows B-3 UpdateLicense.sh merging license keys on UNIX B-3 upgrade 5-1 V version number A-4
Rank Engine database creating 4-11 roles seeding SDS database 4-16	
SDS starting 4-15 SDS database seeding 4-16 SDS database script running 3-2, 4-6 running on Oracle 4-8 running on SQL Server 4-7, 4-8 search service starting 4-15 Security and Directory Service A-4 Submit a Document link troubleshooting A-4 Submit page, configuring to use Content Upload 4-20	
T	

troubleshooting A-4